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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/054,653 Confirmation No.: 9448  
First Named Inventor: Bulucea, Constantin Filing Date: 18 January 2002  
Group Art Unit: 2814 Examiner: Farahani, D.  
Atty. Docket No.: NS-5127 US  
Title: Gate-Enhanced Junction Varactor With Gradual Capacitance Variation  
Assignee(s): National Semiconductor Corporation

Mountain View, California  
11 June 2004

**MAIL STOP NON-FEE AMENDMENT**  
**COMMISSIONER FOR PATENTS**  
**PO Box 1450**  
**Alexandria, Virginia 22313-1450**

**AMENDMENT**

Sir:

Responsive to the Office Action mailed 12 February 2004, please amend the above patent application in the following manner.

**IN THE SPECIFICATION**

Amend paragraphs 52, 58, 86, 89, 94, 110, 117, 146, 151, 155, 165, 167, 168, 181 - 183, 194, 196, 217, 225, 226, 243, 268, 272, 279, 280, 312, and 317 as follows:

**[0052]** Fig. 18 is a cross-sectional plan view of an n-channel silicon-gate ~~silicon-gate~~ gate-enhanced junction varactor configured according to the invention.

**[0058]** Fig. 24 is a graph of varactor width-wise lineal capacitance as a function of plate-to-body voltage for the computer-simulated ~~computer-simulated~~ varactor of Fig. 22 at various constant values of gate-to-body voltage.

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